PATENT & TRADEMARK OFFICE
JAN 29 2007
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Title: Method and Apparatus for Stack Emulation During Binary Translation
Inventor: *Moas et al.*
Application No.: 09/458,121
Sheet: 1 of 3
Attorney Docket No: 42P7162
REPLACEMENT SHEET

INITIAL STATE

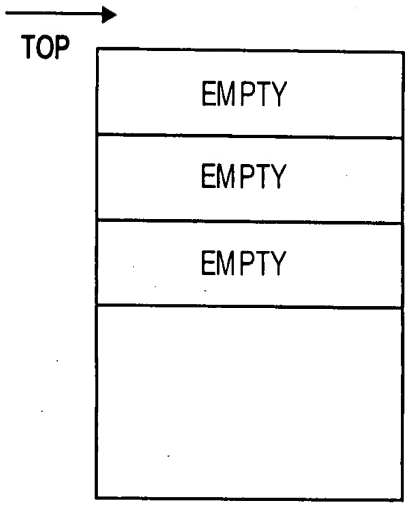

FIG. 1A
(PRIOR ART)

PUSH FP VALUE ONTO STACK

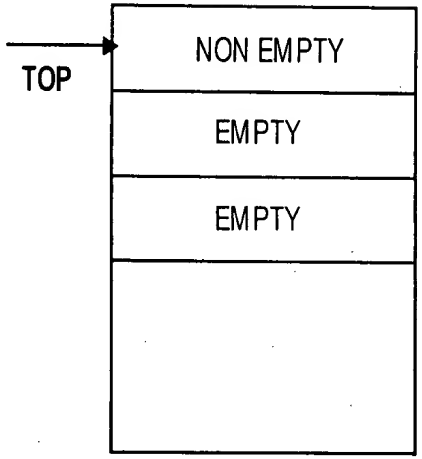

FIG. 1B
(PRIOR ART)

POP FP VALUE OFF STACK:
CAUSE NO STACK FAULT

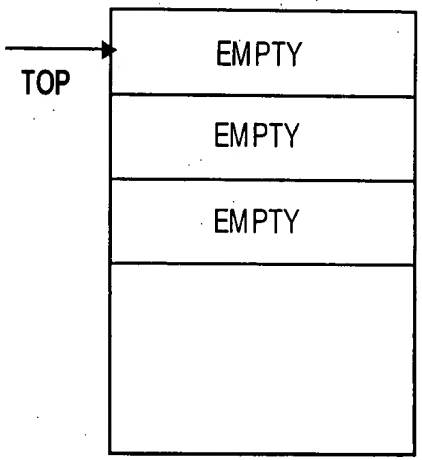

FIG. 1C
(PRIOR ART)

POP FP VALUE OFF STACK:
CAUSE A STACK UNDERFLOW

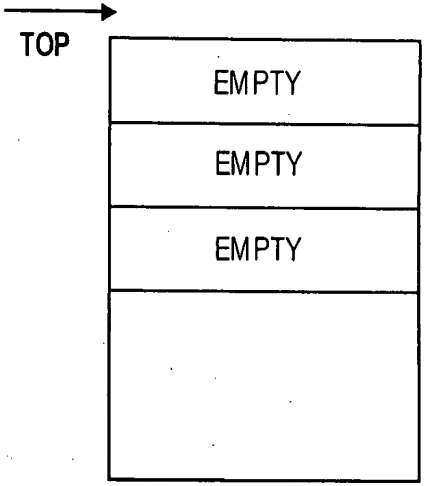

FIG. 1D
(PRIOR ART)

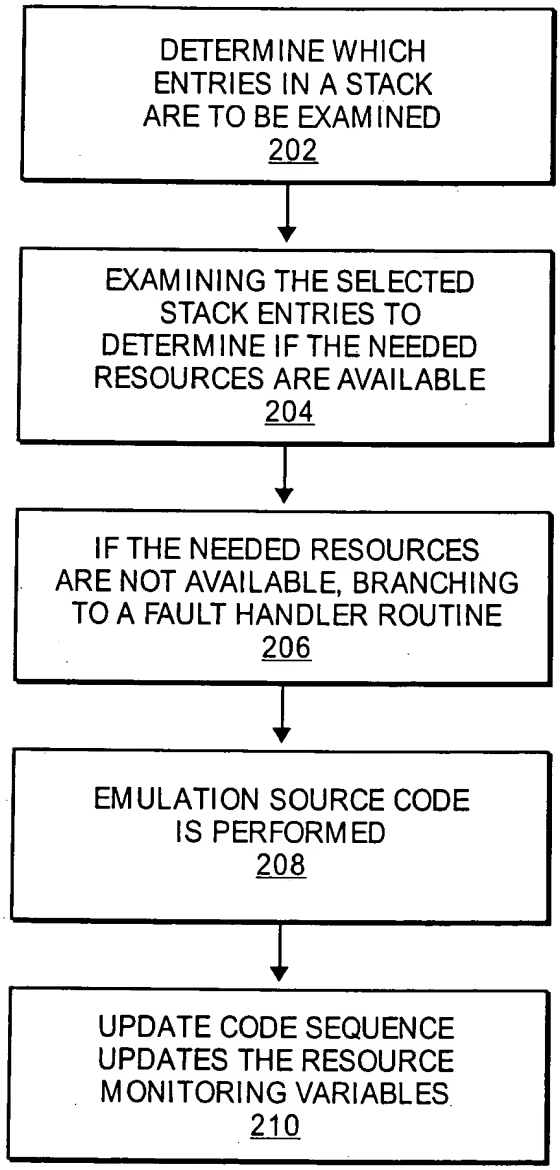
DETERMINE WHICH ENTRIES IN A STACK ARE TO BE EXAMINED
202
EXAMINING THE SELECTED STACK ENTRIES TO DETERMINE IF THE NEEDED RESOURCES ARE AVAILABLE
204
IF THE NEEDED RESOURCES ARE NOT AVAILABLE, BRANCHING TO A FAULT HANDLER ROUTINE
206
EMULATION SOURCE CODE IS PERFORMED
208
UPDATE CODE SEQUENCE UPDATES THE RESOURCE MONITORING VARIABLES
210

FIG. 2

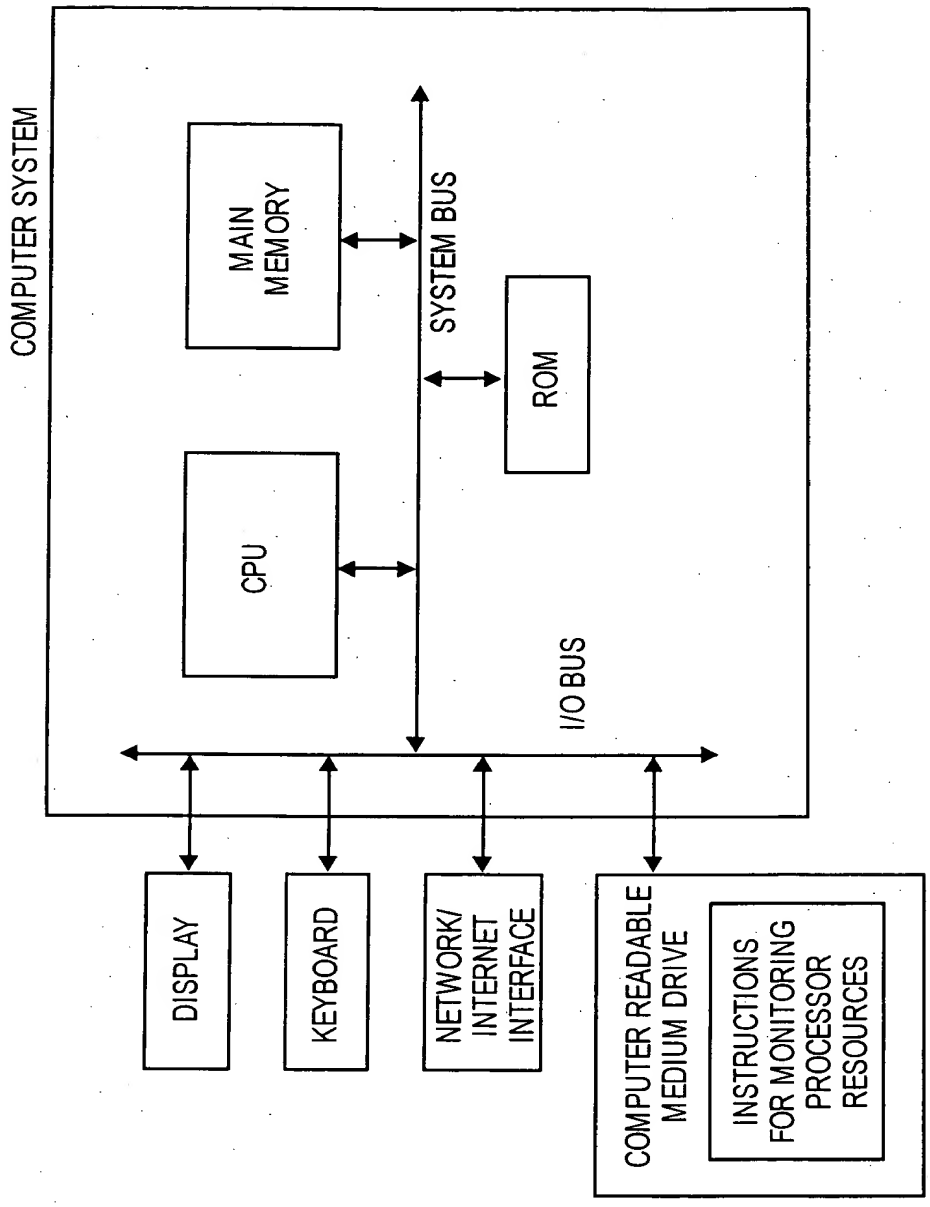
COMPUTER SYSTEM
MAIN MEMORY
SYSTEM BUS
ROM
CPU
I/O BUS
DISPLAY
KEYBOARD
NETWORK/ INTERNET INTERFACE
COMPUTER READABLE MEDIUM DRIVE
INSTRUCTIONS FOR MONITORING PROCESSOR RESOURCES

FIG. 3